

Title: Amendment  
Filing Date: September , 2003  
Address: To the Commissioner

Identification of the Case

Application Number: 181028/2001

Party effecting the amendment:

Identification Number: 000005108

Name: HITACHI, LTD.

Agent

Identification Number: 100075096

Patent Agent

Name: Yasuo Sakuta

Amendment 1

Object of Amendment · Document Title: Specification

Object of Amendment · Item Title: Claims

Method of Amendment: Conversion

Amendment Details

[Claims]

[Claim 1]

An optical transmitter which multiplexes an optical data signal and an optical supervisory signal and transmits them, comprising:

an optical amplifier which consists of an optical fiber for amplifying said optical data signal and an exciting light source for outputting exciting light which goes into said optical fiber and gives a gain to said optical fiber;

a monitor which detects the output value of said optical data signal amplified by said optical amplifier, makes a decision on a fault in said optical amplifier according to said output value, and transmits said fault information as said optical supervisory signal with a wavelength of approximately 1.48  $\mu\text{m}$ ; and,

a multiplexer which multiplexes said optical data signal outputted from said optical amplifier and said optical supervisory signal outputted from said monitor;

wherein said optical supervisory signal includes control information for a device connected at a subsequent stage. .

[Claim 2]

The optical transmitter as claimed in Claim 1, wherein said monitor makes a decision on a fault by comparing said output value with a predetermined value.

[Claim 3]

An optical transmitter which multiplexes and transmits an amplified optical data signal and an optical supervisory signal, comprising:

an exciting light source which outputs exciting light used to amplify said optical data signal;

a first multiplexer which multiplexes said optical data signal and said exciting light;

said optical fiber which receives said optical data signal and said exciting light from said first multiplexer and transmits said amplified optical data signal;

a monitor which detects the output value of said optical data signal amplified by said optical amplifier, makes a decision on a fault in said optical fiber according to said output value, and transmits said fault information as said optical supervisory signal with a wavelength of approximately 1.48  $\mu\text{m}$ ; and,

a second multiplexer which multiplexes and transmits said amplified optical data signal outputted from said optical fiber and said optical supervisory signal outputted from said monitor;

wherein said optical supervisory signal includes control information for a device connected at a subsequent stage.

[Claim 4]

The optical transmitter as claimed in Claim 3, wherein said monitor makes a decision on a fault by comparing said output value with a predetermined value.